

We claim:

1. A method of forming a dual function fabric comprising the steps of:

providing a fabric substrate having first and second surfaces;

5 contacting the first surface of the fabric substrate with a first chemical treatment for providing a first function to said first surface; and

contacting the second surface with a second chemical treatment for providing a second function to said second surface,  
10 wherein said first and second functions are distinct from each other, and wherein said first and second chemical treatments are incompatible with each other.

2. The method according to Claim 1, wherein said first and second  
15 chemical treatments are selected from the combinations of: a strongly cationic chemical treatment and a strongly anionic chemical treatment, a strongly anionic chemical treatment in combination with a multivalent metal ion, and a cationic fluorochemical in combination with a nonionic wicking chemistry with a basic chemical treatment.

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3. A method of forming a dual function fabric comprising the steps of:

providing a textile substrate having first and second surfaces;

25 contacting said first surface of said textile substrate with a cationic chemical treatment; and

contacting said second surface with an anionic chemical treatment, to thereby form a fabric having a first side exhibiting a first type of performance and a second side exhibiting a second type of performance that is different from said first type of performance.

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4. The method according to Claim 3, wherein said steps of contacting said first surface with a cationic chemical treatment and said second surface with an anionic chemical treatment are performed substantially simultaneously.

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5. The method according to Claim 3, wherein said anionic chemical treatment is selected from the group consisting of wicking agents, acrylic soil release agents, and fluorosurfactants.

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6. The method according to Claim 3, wherein said cationic chemical treatment comprises a water repellent, and said anionic chemical treatment is a wicking agent.

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7. The method according to Claim 6, further comprising the step of pretreating the substrate with a soil release fluorochemistry prior to treating the fabric with the cationic and anionic chemical treatments.

8. The method according to Claim 1, wherein said cationic chemical treatment is water and oil repellent.

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9. A textile fabric comprising first and second surfaces, wherein said first surface has a cationic chemical treatment and said second

surface has an anionic chemical treatment, and each of said chemical treatments are substantially isolated on the surfaces to which they are applied.

- 5 10. The fabric according to Claim 9, wherein said cationic chemical treatment comprises a water repellent fluorochemical.

11. A textile fabric comprising first and second surfaces, wherein said first surface exhibits oil repellency of at least about 2.0 after 30  
10 home washes, and said second surface exhibits moisture wicking of about 30 seconds or less when tested according to the Drop Wicking Test Method.

12. A fabric according to Claim 11, wherein said fabric scores at  
15 least about a 3.0 at 0/2 and 4/6 when tested according to AATCC Test Method 130-1995.

13. A fabric according to Claim 12, wherein said fabric scores about 10 seconds or less when tested according to AATCC Test Method  
20 79-1995.

14. A method of making a dual function fabric comprising the steps of:  
applying an oil repellent chemistry to a first surface of said  
25 fabric and

applying a wicking chemistry to an opposite surface of said fabric, wherein said steps of applying oil repellent and wicking chemistry are conducted as a wet-on-wet process.

5    15.    A fabric having first surface that is functionally different from the second surface, wherein each of the first and second surfaces have been treated with a chemical treatment that increases the fabric weight by less than 1%.

10   16.    A fabric having a first surface comprising a cationic chemistry, wherein said first surface repels oil, and a second surface having an anionic fluorosurfactant, wherein said second surface wicks moisture.

15   17.    The fabric according to Claim 16, wherein said first surface also releases oil stains.

18.    A fabric having a first surface having a chemical treatment that imparts moisture repellency and a second surface that has a chemical treatment designed to impart moisture wicking, wherein  
20   each of said chemical treatments are substantially isolated on the fabric surface to which they were applied.

19.    A process for making a dual function fabric comprising the steps of treating a first fabric surface with an anionic chemistry and  
25   treating an opposite surface of said fabric with a cationic chemistry, to thereby isolate the chemistries onto the respective surface to which they were applied.

20. A process according to Claim 19, wherein said anionic chemistry imparts a different function to said fabric from said cationic chemistry.

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21. A fabric having first and second surfaces, said fabric comprising a cationic chemistry applied to said first surface and an anionic chemistry on said second surface, wherein said anionic and cationic chemistries are positioned only on the surfaces to which they are  
10 applied and are not located on the opposite fabric surface.